



# Minimally Disruptive Medicine

a respectful approach to asthma care delivery

Victor M. Montori, MD, MSc  
Professor of Medicine  
KER UNIT  
Center for Clinical and Translational Sciences  
Mayo Clinic

 [montori.victor@mayo.edu](mailto:montori.victor@mayo.edu)

 [@vmontori](https://twitter.com/vmontori)

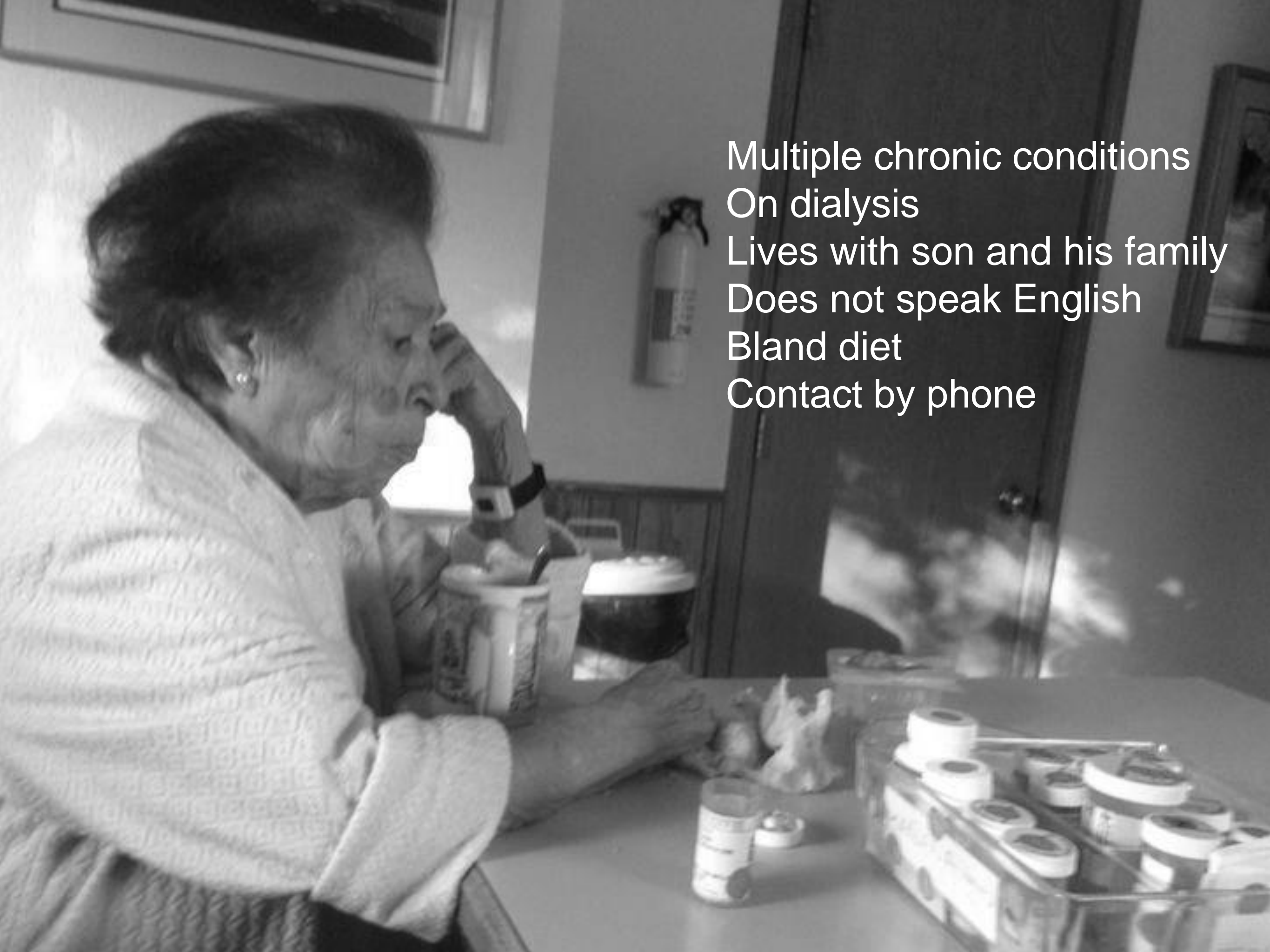
# Accreditation

The content of this webinar presentation has been approved for RN, RT, and CCM CE credit. Not all topics qualify for AE-C re-certification. See [www.naecb.org](http://www.naecb.org) for more details.

Measures have been taken by the Utah Department of Health, Bureau of Health Promotion, to ensure there is no conflict of interest in this activity.

# Disclosure Statement

I do **not** have financial  
relationships to disclose.



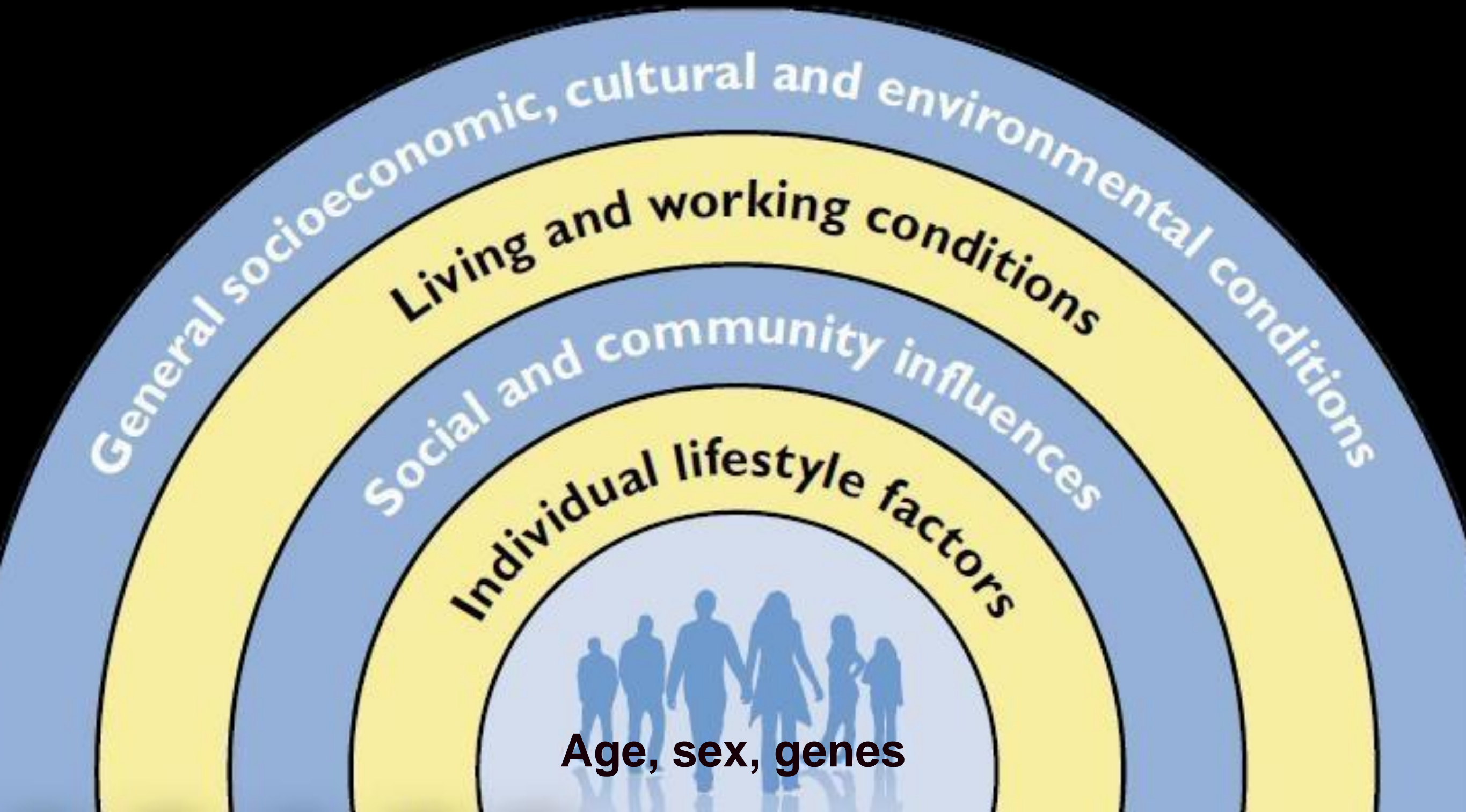
Multiple chronic conditions  
On dialysis  
Lives with son and his family  
Does not speak English  
Bland diet  
Contact by phone



What is best for me?  
What is best for my family?

**Is our care the answer?**





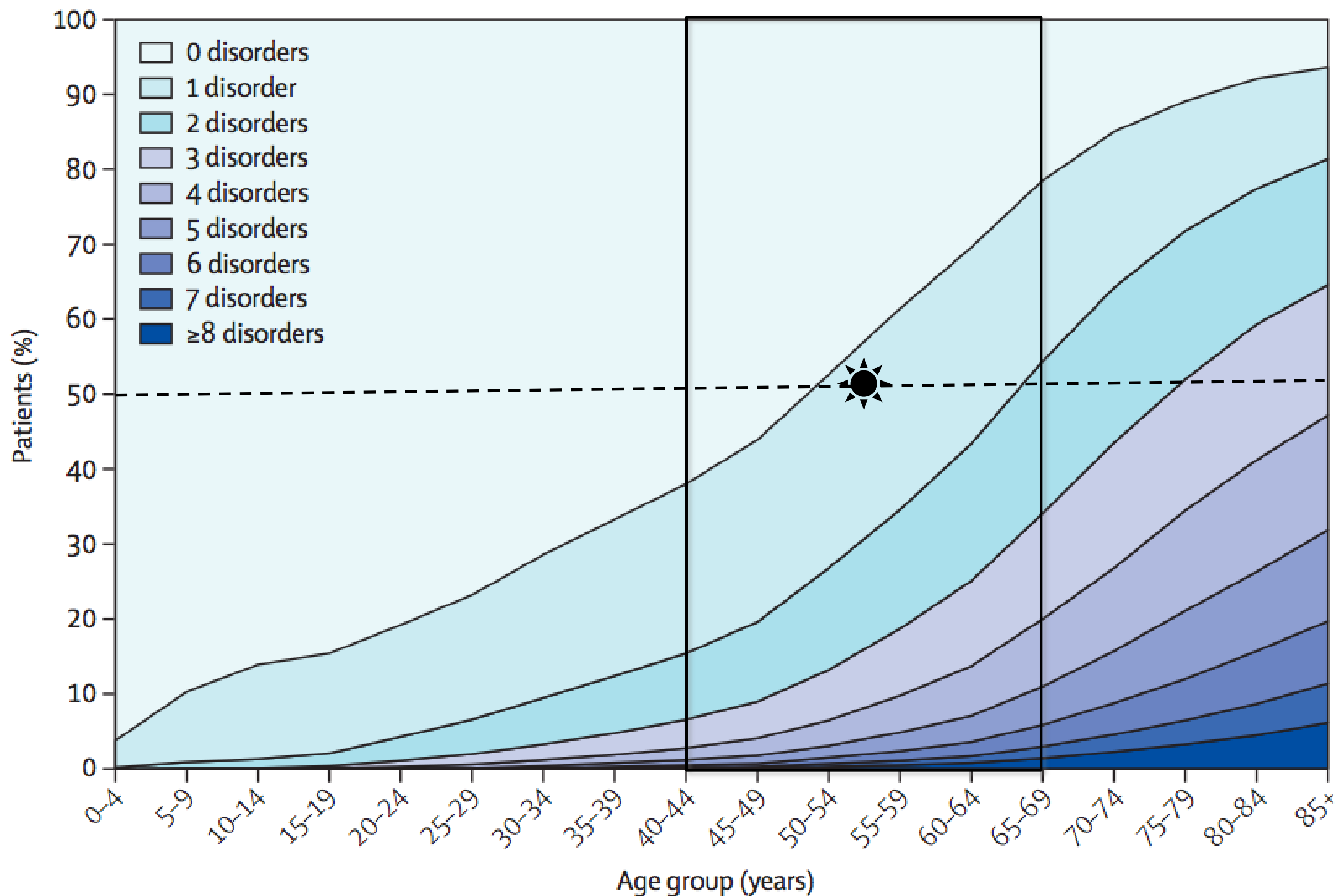
Violence  
Pollution

Chronic  
stress

Multi  
morbidity

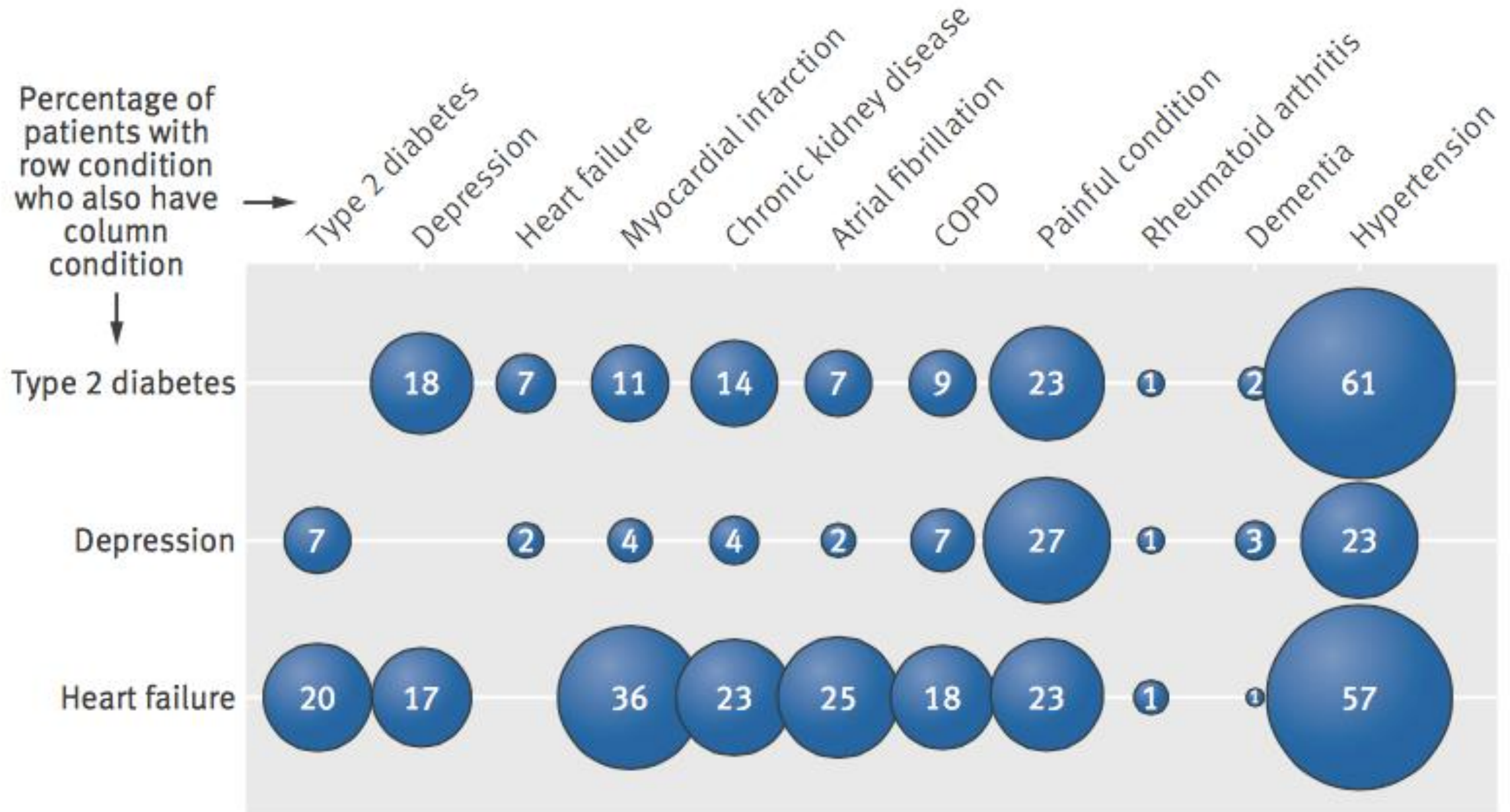
Loneliness  
Obesity

Poverty  
Alienation



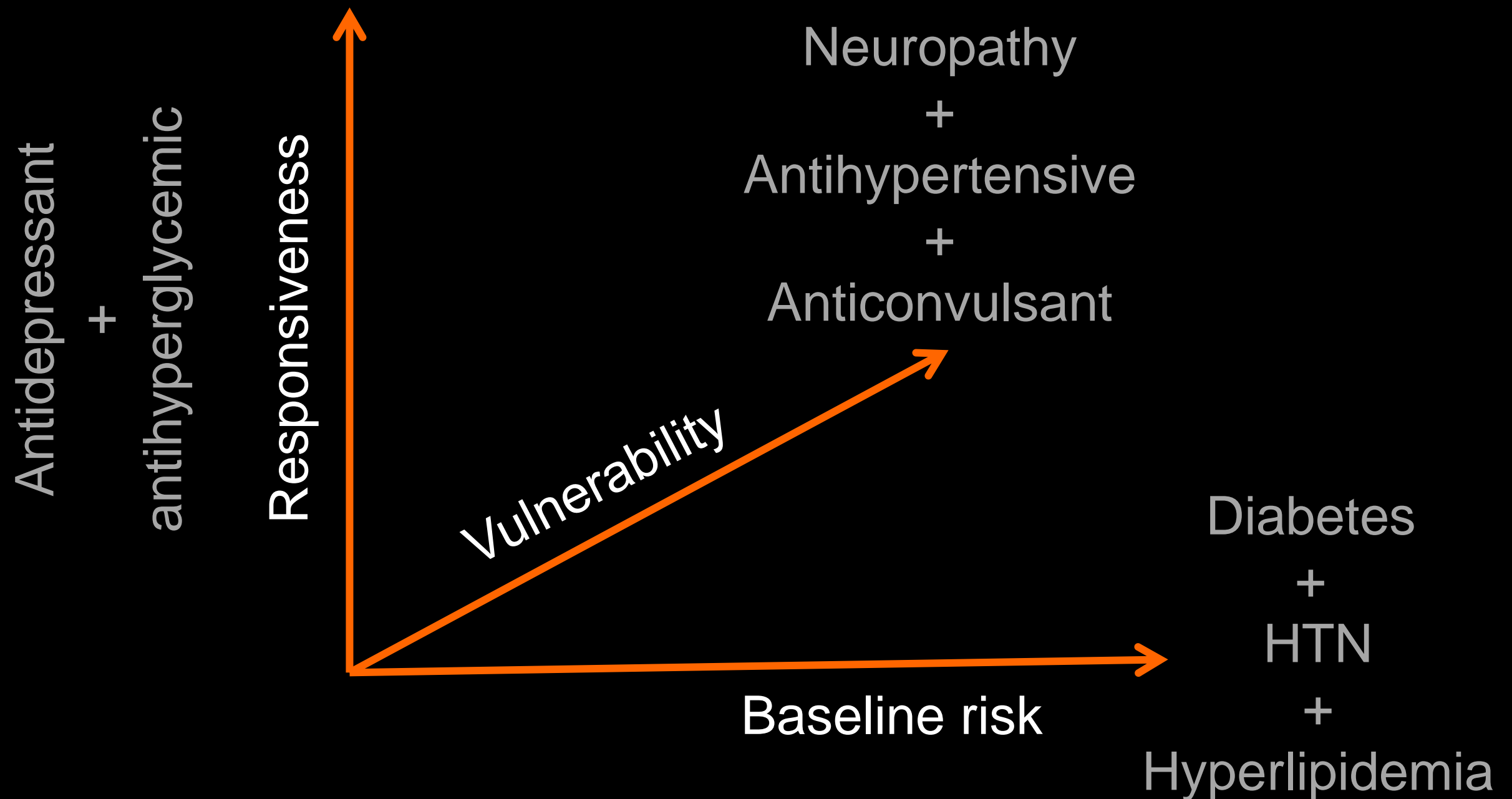
Barnett et al. Lancet 2012

# Comorbidities are common





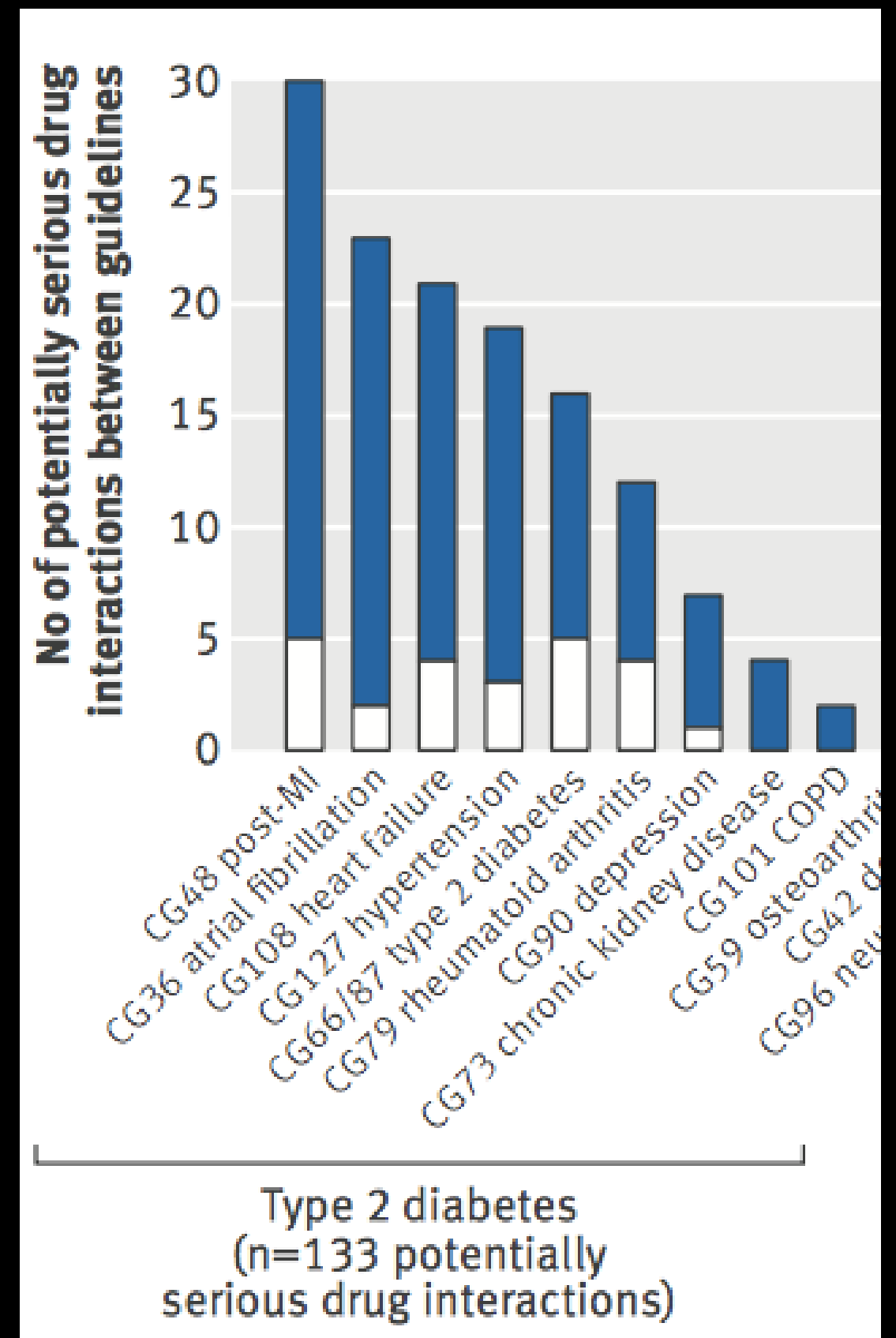
Do the other conditions and their management impact...

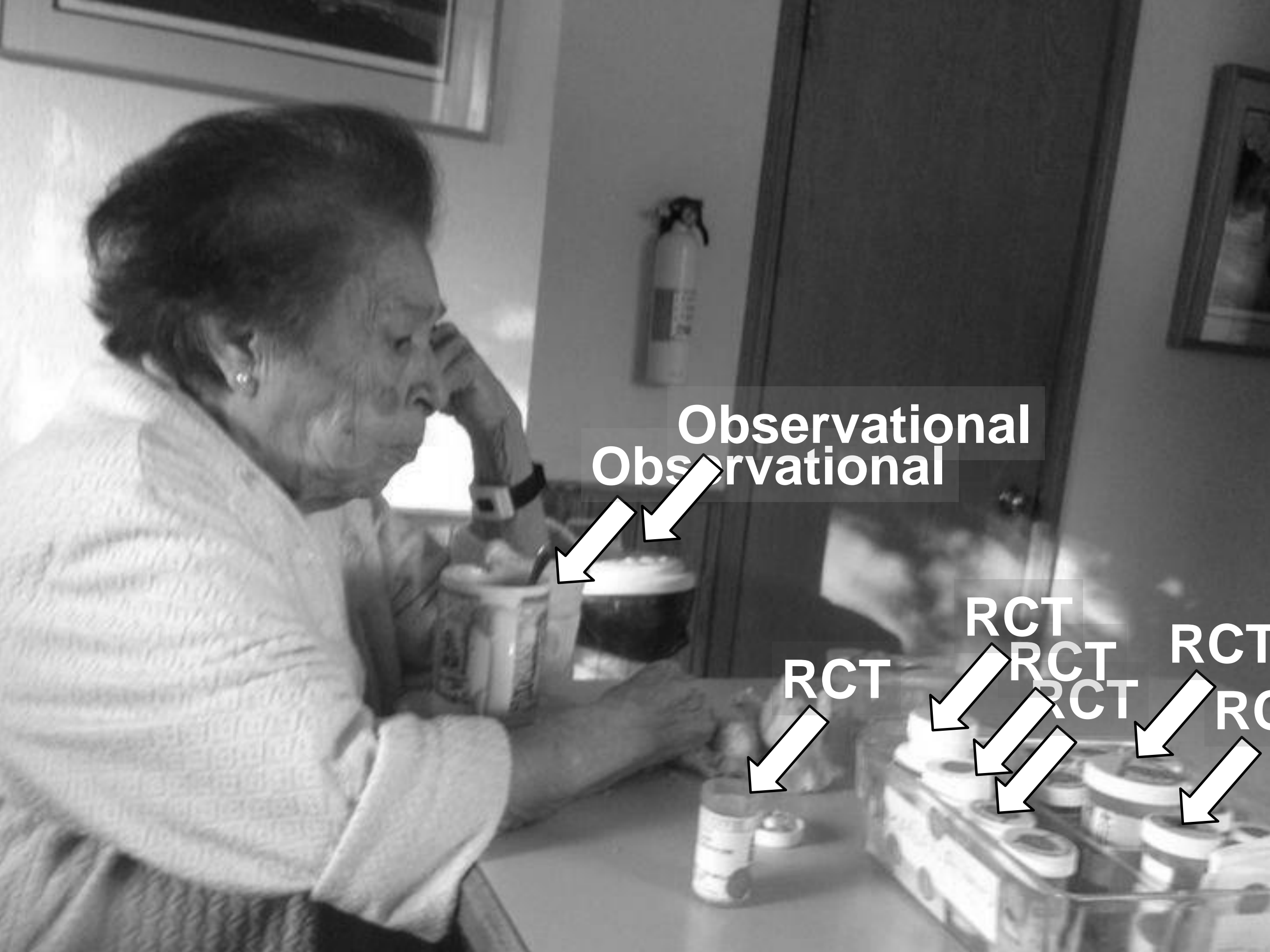


# Expected interactions between guidelines

Drug-disease interactions rare, but for chronic kidney disease.

Drug-drug interactions are common, and ~20% serious





Observational  
Observational

RCT

RCT

RCT

RCT

RCT

RO

Evidence-based guidelines

Care pathways

Quality measures

Specialist care

are

disease focused and context blind

Increasingly complex regimens

Limited to no prioritization

Poor care coordination

Overwhelmed patients and families



# The work of being a patient



Sense-making work



Organizing work and enrolling others



Doing the work



Reflection, monitoring, appraisal

# New work

Prepare for the consultation

Watch educational video

Bring questions; be ready for new ones

Record and review the visit

Review the medical record

Communicate via portal and transmit data

Self-measure, self-monitor, self-manage

Manage appointments, prescriptions, bills

Keep family and important others informed

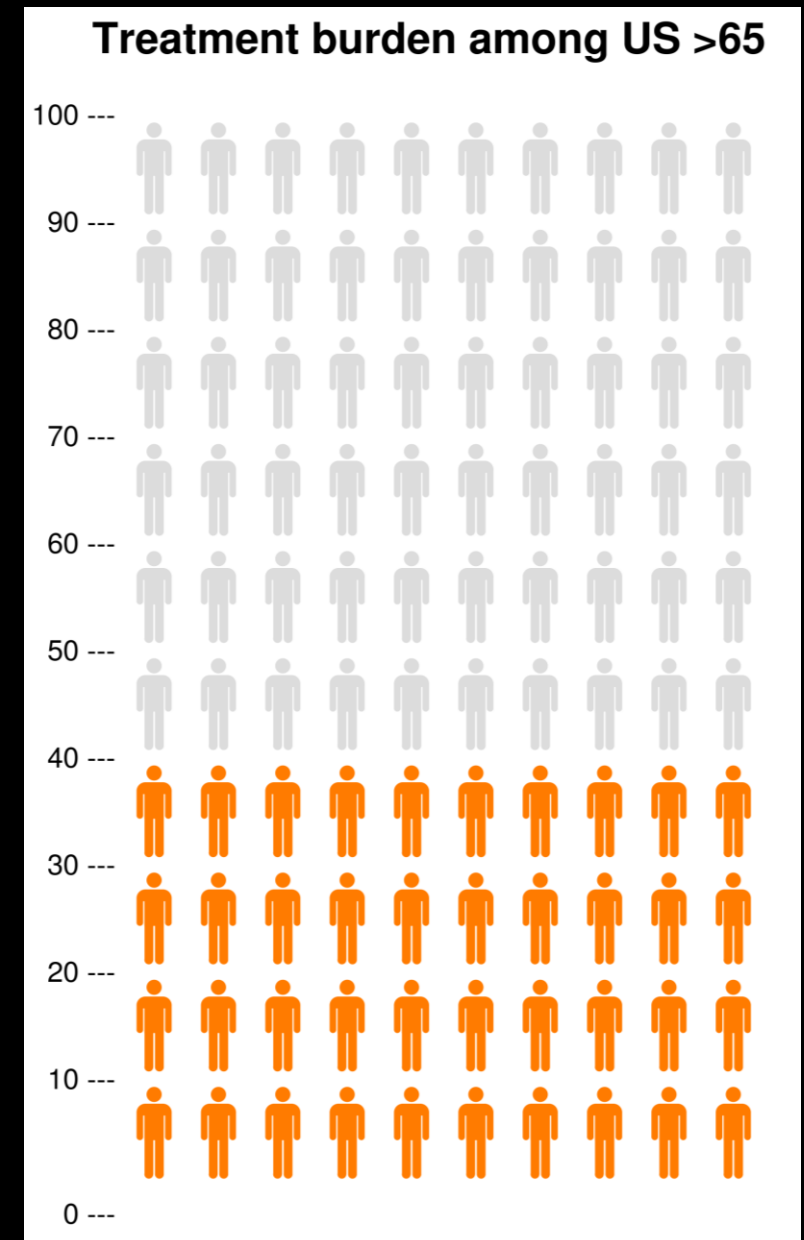
Take care of significant other

Advocate for self and others

# Prevalence of Treatment Burden

Clinicians ask for too much,  
the work is too hard, and it  
gets delayed or not get done.

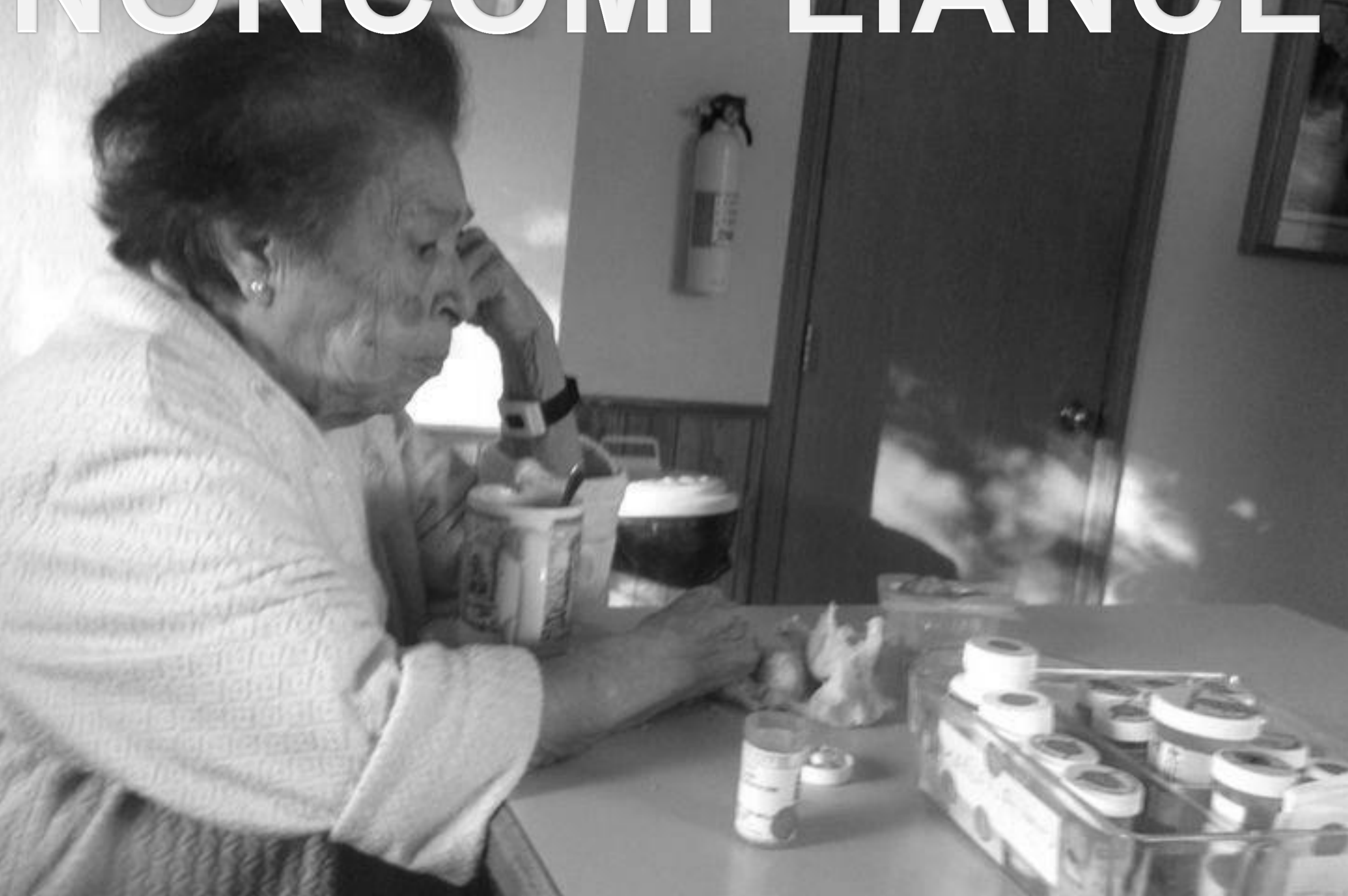
More common in low SES and  
sicker patients who were more  
likely to delegate.



Nationally representative survey of 2040 >65 Americans  
Wolff JL, Boyd CM. JGIM 2015 30: 1497-504



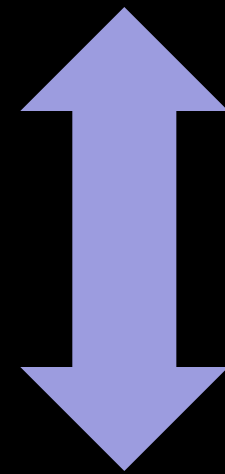
# NONCOMPLIANCE





Purpose  
Resilience  
Literacy  
Bandwidth  
Health  
Financial  
Social  
Environmental

Workload



Capacity

**Imbalance  
workload  
+  
capacity**



# Workload-capacity imbalance?

**↑ Workload**

**Life**

**Treatment burden**

**↓ Capacity**

**Sick**

**Personal**

**Functional**

**Socio-economical**

# Statin Choice

Back

## Current Risk

Select Risk Calculator

**ACC/AHA ASCVD** Framingham Reynolds

Do you have a history of events such as prior heart attack or stroke, acute coronary syndromes, history of angioplasty or stents, etc?

☐ Yes ☒ No

These figures are used to calculate my risk of having a heart attack in the next 10 years:

Age

Gender ☒ M ☐ F

Population Group

Smoker ☐ Yes ☒ No

Diabetes ☐ Yes ☒ No

Treated SBP ☐ Yes ☒ No

**Conv. Unit** SI Unit

Systolic Blood Pressure  mmHg

HDL Cholesterol  mg/dL

Total Cholesterol  mg/dL

Select Current Intervention

**Statins** ☒ No ☐ Std Dose ☐ High Dose

**Aspirin** ☒ No ☐ Low Dose

## Statin/Aspirin Choice Decision Aid

Intervention Issues Notes Document

Benefits vs Downsides according to my personal health information  
Using ACC/AHA ASCVD Risk Calculator

3. View Issues

### Current Risk of having a heart attack

Risk for 100 people like you who **do not** take medicine for heart problems

### Future Risk of having a heart attack

Risk for 100 people like you who do take **standard dose statins**

Over 10 years

**6** people will have a heart attack

**92** people will have no heart attack

**2** people will be saved from a heart attack by taking medicine



## Weight Change

## Low Blood Sugar (Hypoglycemia)

## Blood Sugar (A1c Reduction)

## Daily Routine

## Daily Sugar Testing (Monitoring)

## Cost

These figures are estimates and are for comparative reference only. Actual out-of-pocket costs vary over time, by pharmacy, insurance plan coverage, preparation and dosage. Under some plans name brands may be comparable in cost to generics.

### Metformin *(Generic available)*

\$0.10 per day      \$10 / 3 months

### Insulin *(No generic available – price varies by dose)*

**Lantus:** Vial, per 100 units: \$10  
Pen, per 100 units: \$43

**NPH:** Vial, per 100 units: \$6  
Pen, per 100 units: \$30

**Short acting analog insulin:** Vial, per 100 units: \$10  
Pen, per 100 units: \$43

### Pioglitazone *(Generic available)*

\$10.00 per day      \$900 / 3 months

### Liraglutide/Exenatide *(No generic available)*

\$11.00 per day      \$1,000 / 3 months

### Sulfonylureas

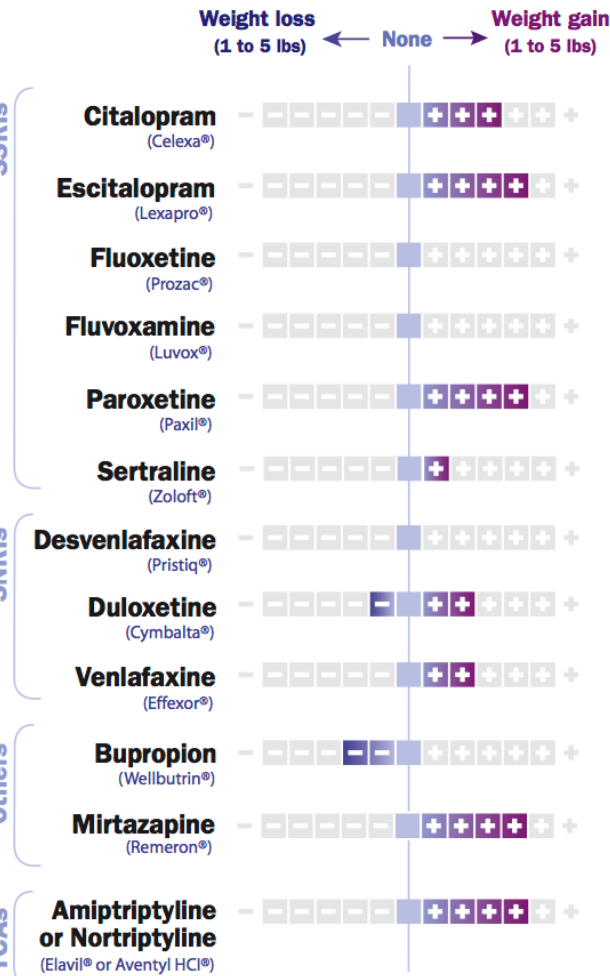
Glipizide, Glimepiride, Glyburide

\$0.10 per day      \$10 / 3 months

What aspect of your next diabetes medicine would you like to discuss first?

Weight Change

Some people may experience weight change. It is most likely to occur over six to twelve months and depends on your actual weight. The chart below is based on a 150 lb person.



Stopping Approach

Quitting your medicine all at once can make you feel sick, as if you had the flu (e.g. headache, dizziness, light-headedness, nausea or anxiety).

Cost

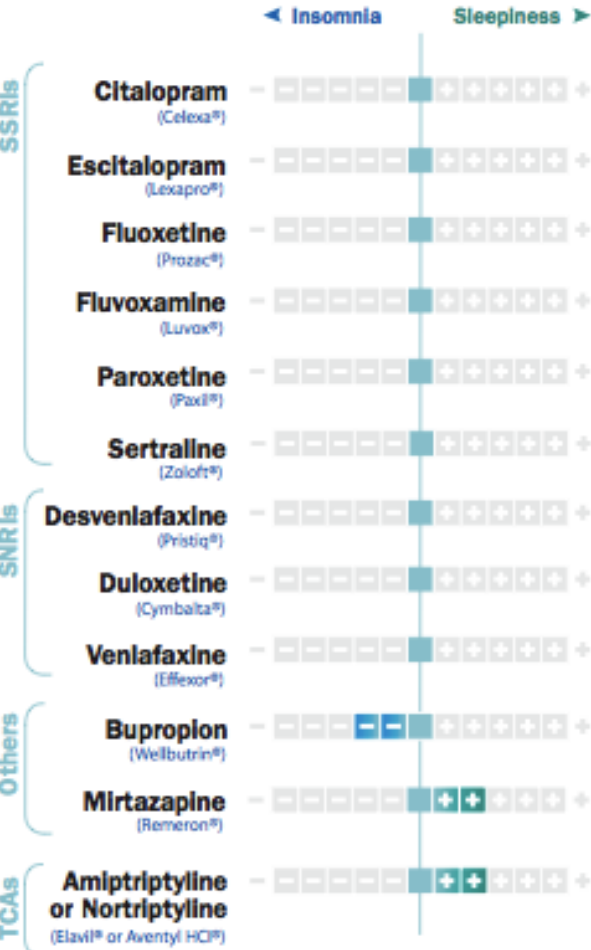
These figures are estimates and are for comparative reference only. Actual out-of-pocket costs vary over time, by pharmacy, insurance plan coverage, preparation and dosage.

Sexual Issues

Some people may experience loss of sexual desire (libido) or loss of ability to reach orgasm because of their antidepressant.

Sleep

Some people may experience sleepiness or insomnia because of their antidepressant.



Keep in Mind

- Depression medicines may cause some:
- constipation, diarrhea and nausea
  - increased risk of suicidal thoughts and behaviors (18- to 24-year-olds)
  - harm to an unborn child
  - risk of developing serotonin syndrome, a potentially life-threatening condition
  - possible drug-drug interactions

Additional considerations	
SSRIs	
Citalopram (Celexa®)	Can cause problems with your heart
Escitalopram (Lexapro®)	Currently no other issues
Fluoxetine (Prozac®)	More likely to interact with other drugs you are taking
Fluvoxamine (Luvox®)	More likely to cause constipation, diarrhea or nausea Not officially recognized as a treatment for Major Depressive Disorder
Paroxetine (Paxil®)	If you are pregnant, this medicine is more likely to cause problems with your unborn child
Sertraline (Zoloft®)	More likely to cause diarrhea
SNRIs	
Desvenlafaxine (Pristiq®)	Tell your doctor if you have high blood pressure
Duloxetine (Cymbalta®)	Can help with pain Tell your doctor if you have high blood pressure
Venlafaxine (Effexor®)	More likely to cause nausea and vomiting Can cause problems with your heart Tell your doctor if you have high blood pressure
Others	
Bupropion (Wellbutrin®)	Higher risk of seizures
Mirtazapine (Remeron®)	Starts to work more quickly
TCAs	
Amitriptyline or Nortriptyline (Elavil® or Aventyl HCl®)	More likely to cause constipation, diarrhea or nausea Can help with pain If you are elderly, this medication may not be the best option

What You Should Know

Will this medicine work for me?

- The antidepressants presented in this decision aid all work the same for treating depression.
- Most people with depression can find one that can make them feel better.
- 6 out of 10 people will feel better with the first antidepressant they try and the rest will have to try other antidepressants before they find the one that is right for them.

How long before I feel better?

- Most people need to take an antidepressant regularly for at least 6 weeks to begin to get the full effect.

Understanding side effects

- Most people taking antidepressants have at least one side effect.
- Many side effects go away after a few weeks, but some only go away after you stop the medicine.

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# Summary of Mayo experience

Age: 40-92 (avg 65)

Primary care, ED, hospital, specialty care

74-90% clinicians want to use tools again

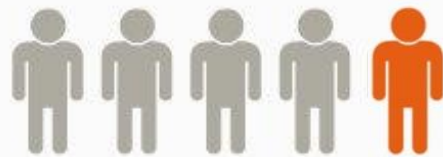
Adds ~3 minutes to consultation

58% fidelity without training

Effects on SDM are similar in vulnerable populations

Variable effect on clinical outcomes, cost

## Accurate Knowledge



60%



Estimated risk  
correctly

50%

## Received information

Right amount



79%

Very clear



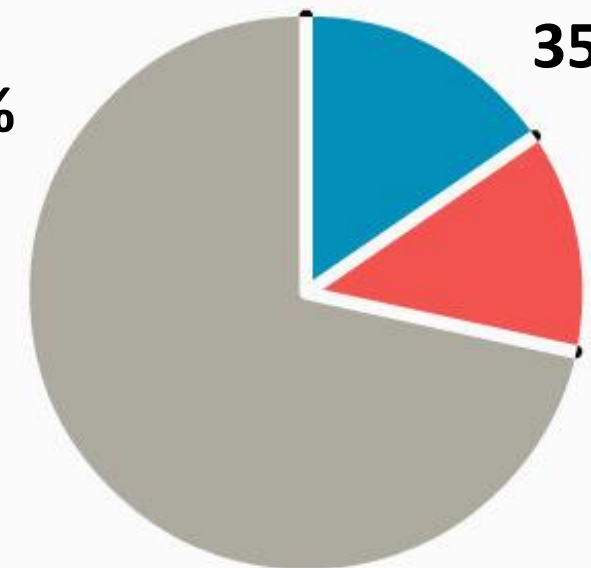
39%

Very helpful



40%

## Engagement of patients



35%

53%



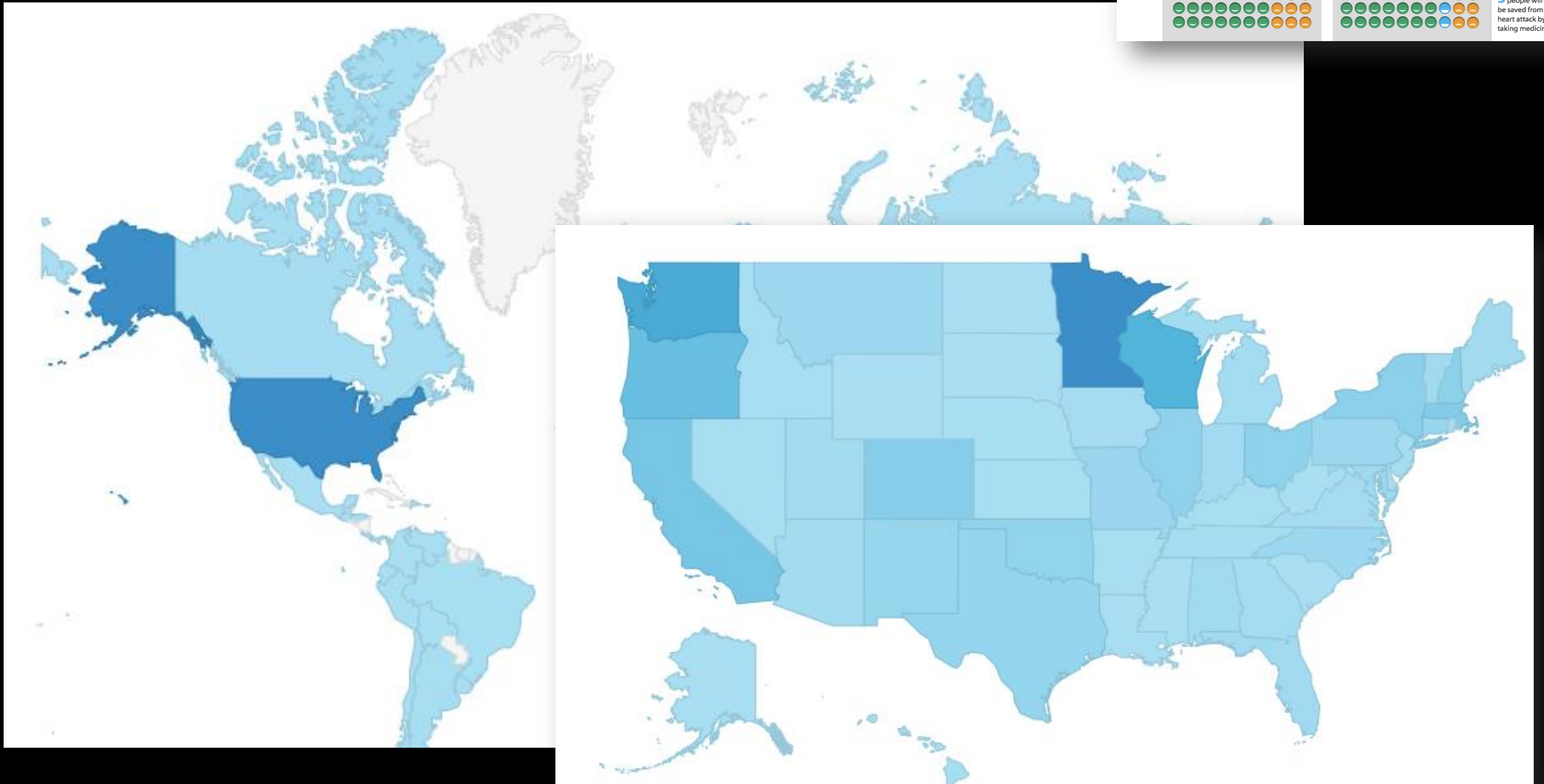
Want to receive information in the same manner





# Adoption

10,000/month



Google Analytics



# Workload-capacity imbalance?

**Treatment burden**

Prioritize (SDM)  
De-prescribe

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**Capacity**



Coaching  
Self management training

Palliative care  
Mental health  
Physical and occupational therapy

Financial and resource security services  
Community and governmental resources

**Are these areas of your life a source of satisfaction, burden, or both?**

Satisfaction Burden

## My Family and Friends

## My Work



My House & Neighborhood  My Finances  



Free time, Relaxation, Fun ☒ ☒

Faith or Personal Meaning ☒ ☒

Being Active ✓ ✓

My Rest and Comfort ☒ ☒

My Emotional Life  

My Senses and Memory     

Eating Well ✔✔

**What are the things that your doctors or clinic have asked you to do to care for your health?**

For example:

*Come in for appointments*

*Take aspirin*

**Do you feel that they are a help,  
a burden, or both?**

A burden  
A help

✓ ✓

✓ ✓

✓ ✓

✓ ✓

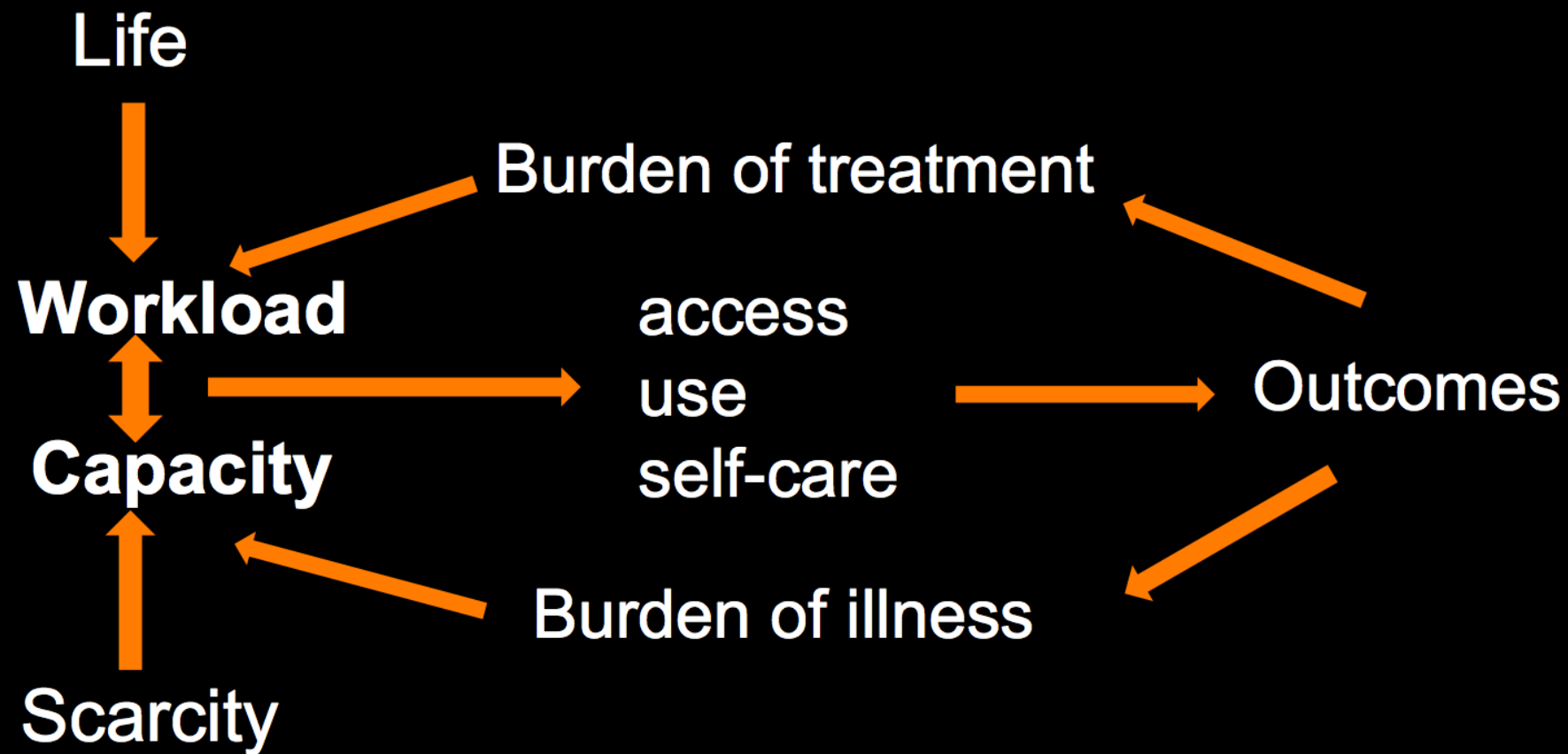
✓ ✓

✓ ✓

✓ ✓

✓ ✓





Shippee N et al JCE 2012

25 yrs and 42 RCTs  
**30-day readmission**  
**Interventions supporting capacity**  
**30% more effective**

Leppin A et al. JAMA Intern Med 2014

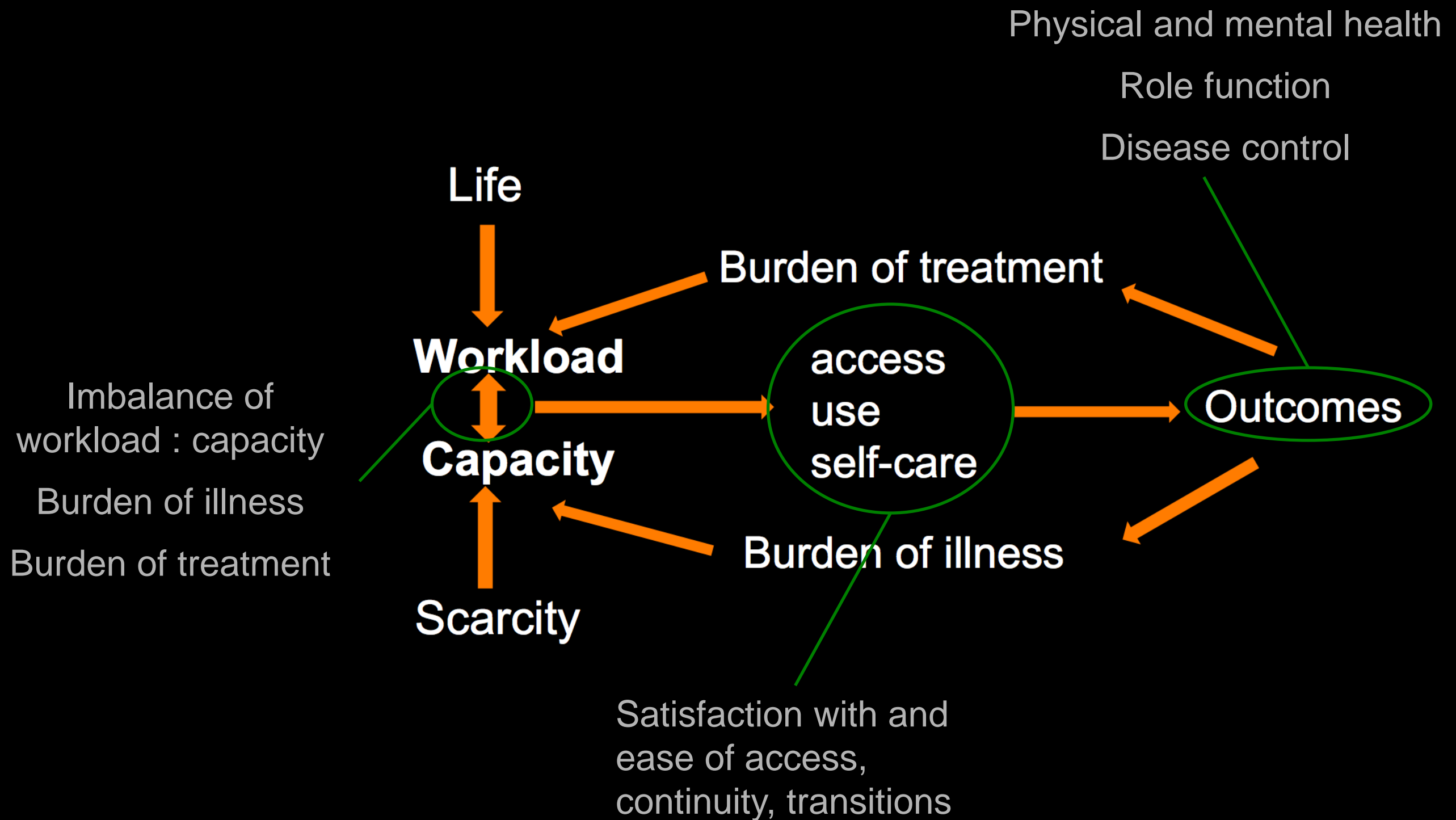
WORKLOAD



CAPACITY



# Accountability





What is best for me?  
What is best for my family?

**Is our care the answer?**









# Minimally Disruptive Medicine

Symposium

Sept. 27-29, 2016

Mayo Clinic

Rochester, Minnesota



[minimallydisruptivemedicine.org](http://minimallydisruptivemedicine.org)

QUESTIONS?

[montori.victor@mayo.edu](mailto:montori.victor@mayo.edu)

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